

REMARKS

Claims 1-18 are pending. Claims 1-12, 14-16, and 18 are withdrawn from consideration in the present application. Claim 17 is canceled herein without prejudice. New claim 19 is submitted herein. Claim 13 is amended herein. Accordingly, amended claim 13 and new claim 19 are presently under consideration.

Support for amendment to the claims is found throughout the specification and in the original claims. Specifically, support for amendment to claim 13 is found, for example, in original claim 17, in paragraph [0014] of United States Patent Application No. 2004-0166517, which corresponds to the instant application, wherein support for diastrophic dysplasia is presented. Support for “an antibody which is specifically capable of binding to at least one DTD polypeptide” as defined in claim 13 is also found in the Abstract and in paragraphs [0002] and [0123] of the corresponding published application. No issue of new matter is introduced by these amendments.

Support for new claim 19 is found throughout the specification and in the original claims. Specifically, support for new claim 19 is found in original claim 4. No issue of new matter is introduced by these amendments.

Priority

Applicant has requested and is awaiting a Certified Copy of United Kingdom Application No. 011644.8 (filed June 15, 2001). Upon receipt thereof, a Certified Copy of this application will be submitted for the Examiner’s consideration.

Specification

The Specification is amended herein to delete embedded hyperlinks and other forms of browser-executable code. In view of the above, it is believed that the objection to the Specification may be withdrawn.

Rejections under 35 USC § 112

Claims 13 and 17 are rejected under 35 USC § 112, first paragraph, for allegedly failing to comply with the written description requirement. Claim 17 is canceled herein,

thereby obviating any rejection of this claim. In view of the amendment to the claim 13, the rejection, as it applied to claim 13 is respectfully traversed.

The Examiner acknowledges that the written description requirement is satisfied for SEQ ID NO: 1 and an antibody that is specific for the DTD protein defined as SEQ ID NO: 1. Claim 13 is amended herein in accordance with the Examiner's suggestion. In view of the above, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 13 and 17 are rejected under 35 USC § 112, first paragraph, for allegedly failing to comply with the enablement requirement. Claim 17 is canceled herein, thereby obviating any rejection of this claim. In view of the amendment to claim 13, the rejection, as it applied to claim 13 is respectfully traversed.

The Examiner acknowledges that the specification is enabling for treating cancer comprising administering an antibody capable of binding to at least one DTD polypeptide identified as SEQ ID NO: 1. Claim 13 is amended herein to be directed to treating cancer as suggested by the Examiner. Accordingly, it is believed that reconsideration and withdrawal of this rejection are in order.

Claims 13 and 17 are rejected under 35 USC § 112, second paragraph, for alleged indefiniteness. Claim 17 is canceled herein, thereby obviating any rejection of this claim. Claim 13 is amended to recite that the acronym DTD stands for diastrophic dysplasia. In view of the amendment to the claim 13, the rejection, as it applied to claim 13 is respectfully traversed.

In view of the amendments to the claims, therefore, reconsideration and withdrawal of the rejection of the claims under 35 USC § 112, first paragraph, are respectfully requested.

Rejection Under 35 U.S.C. § 102

Claim 13 is rejected under 35 U.S.C. §102(e) as allegedly anticipated by United States Patent Application Publication No. 2003/0108963 A1 (filed July 25, 2002). In view of Applicant's arguments presented herein and amendments to the claims, the rejection as it applied to claim 13 is respectfully traversed.

Claim 13 is amended to be directed to a method for treatment of breast cancer in a subject comprising administering to the subject a therapeutically effective amount of an antibody which is specifically capable of binding to at least one Diastrophic Dysplasia polypeptide comprising the amino acid sequence of SEQ ID NO: 1. United States Patent Application Publication No. 2003/0108963 relates to sequence 369, which is taught therein to be a marker for prostate cancer. There is no teaching in this application that sequence 369 is a marker for any other cancer. Although the Examiner states that antibodies against amino acid sequence 369 may be used as therapeutic agents in treating cancer, Applicant asserts that this reference is not enabled for the treatment of any other kind of cancer other than prostate cancer. More specifically, there is no teaching in U.S. Patent Application Publication No. 2003/0108963 that sequence 369 is a marker for breast cancer. Indeed, there is no discussion pertaining to breast cancer in this application. It therefore follows that the 2003/0108963 application fails to teach that there is any reason to treat a subject having breast cancer with an antibody capable of binding to a polypeptide comprising SEQ ID NO: 1. In view of the above, this reference fails to teach at least one element of the instant claims.

In view of the above, U.S. Patent Application Publication No. 2003/0108963 fails to anticipate the instant claims. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of the instant claims based on this reference.

Rejection Under 35 U.S.C. § 103

The Examiner has rejected claims 13 and 17 under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent Application Publication No. 2003/0108963 and in further view of U.S. Patent Application Publication No. 2003/0108963 and Marin et al. (Br. J. Cancer 76(7):923-9, 1997). In view of the clarifying amendments to the claims and Applicant's arguments presented herein, the rejection is respectfully traversed.

The Examiner acknowledges that the patent application does not teach that the human disease is breast cancer. The Examiner relies on Marin et al. for teaching that DTD, an acronym which refers to DT-diaphorase in this reference, is associated with breast tumors. In that the instant claims define the acronym DTD recited therein as

Diastrophic Dysplasia and further recite that this polypeptide comprises the amino acid sequence of SEQ ID NO: 1, Applicant maintains that the combined teachings of U.S. Patent Application Publication No. 2003/0108963 and Marin et al. fail to teach at least one aspect of the present method.

The Examiner has rejected claims 13 and 17 under 35 U.S.C. §103(a) as allegedly unpatentable over U. S. Patent No. (USPN) 6,812,339 (effective filing date October 20, 2000) and in further view of U.S. Patent Application Publication No. 2003/0108963 and Marin et al. (Br. J. Cancer 76(7):923-9, 1997). In view of the clarifying amendments to the claims and Applicant's arguments presented herein, the rejection is respectfully traversed.

The Examiner states that USPN 6,812,339 teaches amino acid sequence 10387 which shares 99.9% sequence homology with SEQ ID NO: 1 of the present invention. The Examiner also offers that antibodies against amino acid sequences 10387 are recognized as modulators that could be administered to treat human disease. The Examiner does, however, acknowledge that USPN 6,812,339 does not teach that the human disease is breast cancer. In that the instant claims define the acronym DTD recited therein as Diastrophic Dysplasia and further recite that this polypeptide comprises the amino acid sequence of SEQ ID NO: 1, Applicant maintains that the combined teachings of USPN 6,812,339, U.S. Patent Application Publication No. 2003/0108963 and Marin et al. fail to teach at least one aspect of the present method.

Accordingly, the Examiner is respectfully requested to reconsider the validity of the rejection of the claims under 35 U.S.C. §103 and withdraw the rejection.

Fees

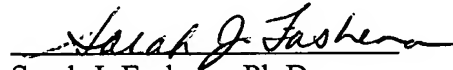
No additional fees are believed to be necessitated by this amendment. However, should this be an error, authorization is hereby given to charge Deposit Account No. 11-1153 for any underpayment or to credit any overpayment.

Conclusion

It is submitted, therefore, that the claims are in condition for allowance. No new matter has been introduced. Allowance of all claims at an early date is solicited. In the

event that there are any questions concerning this amendment, or application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of this application may be expedited.

Respectfully submitted,



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